

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings of claims in the application:

Listing of Claims:

- 1 1. (Currently amended) A method for inspecting semiconductor devices
2 comprising:
3 based on a product name and a process name inputted through a terminal,
4 automatically accessing a design database by a computer processor via a communication means
5 to download chip matrix data and chip size data;
6 automatically setting an inspection condition by said computer processor using
7 the downloaded chip matrix data and chip size data; which are obtained by accessing a design
8 database via communication means;
9 inspecting [[a]] at least one of the semiconductor device devices with said
10 inspection condition;
11 automatically revising said inspection condition by said computer processor using
12 data obtained by the inspecting; and
13 inspecting the semiconductor devices using said revised inspection condition.
- 1 2. (Previously presented) The method for inspecting semiconductor devices
2 according to claim 1, wherein said inspection condition comprises information whether or not an
3 area for inspection is in an area in which false alarms tend to occur.
- 1 3. (Previously presented) The method for inspecting semiconductor devices
2 according to claim 1, wherein said inspection condition is revised during said revising so that
3 only actual foreign matter is detected or a false alarm rate is less than a preset amount.
- 1 4. (Currently amended) A method for inspecting semiconductor devices
2 comprising:

3 based on a product name of specifying a semiconductor device product name and
4 names of processes used to process this said product inputted through a terminal, automatically
5 accessing a design database by a computer processor via a communication means to download
6 chip matrix data and chip size data; and extracting related information from a design data
7 obtained by accessing a design database via communication means;
8 automatically setting inspection conditions by said computer processor using said
9 extracted related information; downloaded chip matrix data and chip size data;
10 inspecting [[a]] at least one of the semiconductor devices device with said
11 inspection conditions;
12 automatically revising said inspection conditions by said computer processor
13 using data obtained during the inspecting;
14 inspecting the semiconductor devices using said revised inspection conditions;
15 and
16 outputting results of this inspection the inspecting of the semiconductor devices.

1 5. (Previously presented) The method for inspecting semiconductor devices
2 according to claim 4, wherein said inspection conditions set at said setting comprises information
3 whether or not an area to be inspected is in an area in which false alarms tend to occur.

1 6. (Previously presented) The method for inspecting semiconductor devices
2 according to claim 4, wherein said inspection conditions set at said setting are revised at said
3 revising so that only actual foreign matter is detected or a false alarm rate is less than a preset
4 amount.

1 7. (Currently amended) A method for inspecting semiconductor devices
2 comprising:
3 based on a product name and a process name inputted through a terminal,
4 automatically accessing a design database by a computer processor via a communication means
5 to download chip matrix data and chip size data;

6 automatically setting semiconductor device inspection conditions by said
7 computer processor using the downloaded chip matrix data and chip size data;
8 detecting defects by inspecting semiconductor devices using said set inspection
9 conditions;
10 classifying defects detected at said detecting as disposed in a transparent film or a
11 non-transparent film by using the downloaded chip matrix data and chip size data; information
12 from database obtained by accessing said database via communication means;
13 automatically revising said set inspection conditions by said computer processor
14 using classification results; and
15 inspecting semiconductor devices using said revised set inspection conditions.

1 8. (Original) The method for inspecting semiconductor devices according to
2 claim 7, wherein images of said classified defects are displayed on a screen.

1 9. (Canceled)

1 10. (Previously presented) The method for inspecting semiconductor devices
2 according to claim 7, wherein, in said setting said set inspection conditions, semiconductor
3 device design data is used.

1 11. (Currently amended) A method for inspecting semiconductor devices
2 comprising:
3 based on a product name and a process name inputted through a terminal,
4 automatically accessing a design database by a computer processor via a communication means
5 to download chip matrix data and chip size data;
6 automatically setting inspection conditions by using design data obtained by
7 accessing a design database via communication means the downloaded chip matrix data and chip
8 size data;
9 inspecting said semiconductor devices with said inspection conditions;

10 using results of said inspecting to automatically revise said inspection conditions
11 by said computer processor; with said design data; and
12 inspecting said semiconductor devices using said revised inspection conditions,
13 wherein at least one of said inspection conditions differs by an area inside a chip
14 to be inspected for said semiconductor devices.

1 12. (Previously presented) A method for inspecting semiconductor devices
2 according to claim 11, wherein said inspection conditions comprise defect detection sensitivity,
3 and said defect detection sensitivity differs for the area inside a chip of said semiconductor
4 devices.

1 13. (Previously presented) A method for inspecting semiconductor devices
2 according to the claim 11, wherein said inspection conditions comprise pattern pitch of a special
3 filter which cuts light diffracted from patterns formed on said semiconductor devices and pitches
4 of which differ by the area inside a chip of said semiconductor devices.

1 14. (Currently amended) A method for inspecting a semiconductor device
2 comprising:

3 based on a received identifier~~receiving an identifier~~ for the semiconductor device,
4 automatically accessing a design database by a computer processor to download design data;
5 automatically setting inspection conditions for the semiconductor device using the
6 downloaded design data; ~~obtained [[by]] communicating with a design database;~~
7 inspecting said semiconductor device for defects with said inspection conditions;
8 automatically generating revised inspection conditions based on results of said
9 inspecting; and
10 inspecting said semiconductor device for defects with said revised inspection
11 conditions~~[[,]]~~; and
12 classifying defects detected at said detecting as disposed in a transparent film or a
13 non-transparent film.

14 wherein at least one of the inspection conditions is distinctly set for each area of
15 the semiconductor device to be inspected, and
16 wherein said automatically setting is performed without capturing an image of an
17 actual wafer.

1 15. (Previously presented) The method of claim 14 wherein the design
2 database is a physically remote design database.

1 16. (new) The method of claim 1 wherein said setting is performed without
2 capturing an image of an actual wafer.

1 17. (new) The method of claim 1 further comprising computing an estimate
2 of an amount of light to be detected during said inspecting with said inspection conditions.

1 18. (new) The method of claim 17 further comprising controlling said amount
2 of light detected during said inspecting with said inspection conditions.

1 19. (new) The method for inspecting semiconductor devices according to
2 claim 1, wherein automatically setting the inspection condition comprises at least one of:
3 (i) automatically setting a plurality of inspection parameters in the inspection
4 devices;
5 (ii) automatically increasing a number of detection signal parameters from
6 specific repetitive patterns used in statistical processing during defect detection;
7 (iii) automatically adding to detection results information as to whether or not
8 an area in which defect is detected is one in which false alarms tend to occur;
9 (iv) automatically determining if a defect is in a transparent film or a non-
10 transparent film and adding information of the defect to detection results; and
11 (v) automatically setting an inspection sensitivity to a level to suit design rules
12 for each area within a semiconductor device chip or to suit a degree of functional importance.

1 20. (new) The method of claim 4 further comprising classifying defects with
2 said computer processor as disposed in a transparent film or a non-transparent film.